

REMARKS/ARGUMENTS

Claims 1-11 are amended; claims 12-15 are new; claims 1-15 are pending in this application, upon entry of this amendment. No new matter is added. Support for the amendment can be referenced, for example, in paragraphs 8, 9, 22, 23 of the substitute specification.

Applicant respectfully notes that the claims have been amended to be placed into form corresponding to the allowed claims of related European Patent EP1664499 (B1), which was found allowable over reference DE19743446.

Drawings

The Office Action requires Applicant to furnish a drawing under 37 CFR 1.81(c). The drawings are objected to under 37 CFR 1.83(a). Applicant respectfully disagrees. Applicant directs the Examiner to Fig. 3, to the section of outlet pipe 324 above separating wall 308, which shows at least a slightly larger diameter than outlet pipe 220 of Fig. 2.

Claim Rejections – 35 USC § 102

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by DE19743446 to BMW, hereinafter referred to as '446. Applicant respectfully traverses the rejection.

The '446 reference does not teach nor suggest, *inter alia*, "a first exhaust train starting from a first cylinder bank... at least one second exhaust train parallel thereto, starting from a second cylinder bank.... the first muffler and the second muffler have a mutually deviating structure ", as required by amended claim 1. The '446 reference does not show or hint at two exhaust trains starting from different cylinder banks. Additionally, the '446 reference clearly shows a non-deviating muffler arrangement, as two closely situated parallel mufflers are shown, rather than the deviating structure as claimed, and as shown for example, in Fig. 1 of the instant application.

The '446 reference also does not teach nor suggest, *inter alia*, "the first and second exhaust trains are guided over the whole length with at most one cross-over position", as required by amended claim 1. The '446 reference only shows a rear section of a single exhaust train, and accordingly does not show the whole length of the exhaust system.

In light of the arguments above, claim 1, and all claims dependent therefrom are not anticipated by the '446 reference.

The amendments to claim 1 are also not obvious in view of the prior art. The claimed invention is non-intuitive, as a different type of muffler structure is used for separate exhaust trains of different cylinder banks of a common engine to provide a forceful and powerful sound without excessive volume. As discussed in the background section of the instant application, a person commonly skilled in the art designs an exhaust system to conform to noise and back pressure requirements, by using cross-over sections before and after muffler sections ('446, 4&9, all Figs) and/or exhaust flaps ('446, 14, all figs). However, the prior art exhaust design can only present a powerful exhaust sound by increasing volume, which contrasts with comfort requirements. Thus, the prior art is a compromise between comfort and sound type, which teaches away from the instant claims. The instant invention overcomes this problem according to the structure claimed herein by using different outlet pipe lengths to tune the effective acoustic length of the exhaust mufflers (see paragraphs 8 and 9 of the replacement specification).

Claim Rjections – 35 USC § 103

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over '446. Applicant respectfully traverses the rejection. These claims derive patentability ultimately from claim 1, and also recite claim limitations which are novel and non-obvious in view of the prior art.

Claims 4-6 and 8-9 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over '446 in view of EP0682172, hereinafter '172. These claims derive patentability ultimately from claim 1, and also recite claim limitations which are novel and non-obvious in view of the prior art.

Claims 8, 9:

Additionally with respect to claim 8, the Examiner stated, "(as '172 discloses that at least one of the plates is to be perforated it would have been obvious to one of ordinary skill in the art to apply this teaching to either plate 8a, plate 8b, or to both plates 8a and 8b)". Applicant respectfully disagrees with the argument put forth by the Examiner, which is not consistent with the requirements of *KSR*.

Referring to Fig. 5 of the '172 reference, if 8a was intact, and 8b was perforated, the muffler would clearly fail to operate as intended, as the main inlet (area 9) of the exhaust outlet pipe 7 would receive insufficient exhaust flow. Also, the perforations 13 are clearly not capable of supporting sufficient gas flow from the exit of inlet pipe 6 and the perforations 12, if 8a was intact and 8b was perforated. Accordingly, one commonly skilled in the art would not modify the muffler of the '172 reference as the Examiner suggested, as the muffler would be drastically effected. Thus, the reasoning put forth by the Examiner is not logical in light of the structure shown by the prior art, and is improper in light of *KSR*.

Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over '446 in view of '172 and further in view of Uegane (US Publication No. 2001/0018995), hereinafter Uegane. These claims derive patentability ultimately from claim 1, and also recite claim limitations which are novel and non-obvious in view of the prior art.

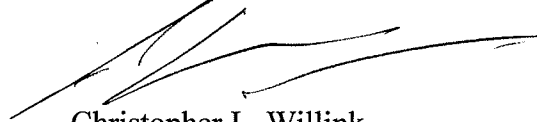
Claim 10 is rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over '446 in view of '172 and further in view of Nilsson (US Publication No. 2001/0045322), hereinafter Nilsson. This claim derives patentability ultimately from claim 1, and also recites claim limitations which are novel and non-obvious in view of the prior art.

CONCLUSION

In view of the foregoing, applicants submit that this application is in condition for allowance, and a formal notification to that effect at an early date is requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 273-4730 (direct dial).

Respectfully submitted,



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